



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,843	10/12/2001	Stephen H. Friend	9301-161	1315
20583	7590	07/20/2005	EXAMINER	
JONES DAY 222 EAST 41ST ST NEW YORK, NY 10017			MARSCHEL, ARDIN H	
			ART UNIT	PAPER NUMBER
			1631	
DATE MAILED: 07/20/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

### **DETAILED ACTION**

Due to the newly applied rejections, summarized below, the Finality of the Office action, mailed 8/25/04, is hereby withdrawn.

The amendment, filed 12/22/04, has been entered.

The Notice of Appeal, filed 12/22/04, is deemed moot in view of this reopening of prosecution.

Applicants' arguments, filed 12/22/04, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. Upon reconsideration, the following rejections and/or objections are newly applied. They constitute the complete set presently being applied to the instant application.

### **NEW MATTER**

Claims 53-59, 67, 68, 71, 72, and 79-81 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The NEW MATTER is exemplified by referring to instant claim 53. Claim 53 has been amended to require the practice of an "interpolated perturbation response profile comprising measurements of said first plurality of cellular components extracted...from perturbation response curves...". Then in part (i) requires measurement of "a second plurality of cellular constituents...". The "perturbation response curves" cited above are

Art Unit: 1631

products of a method inclusive of said part (i) practice. Thus, instant claim 53 now produces the "interpolated perturbation response profile" (claim 53, line 9) from a combination of first and second pluralities of cellular constituents measurements, which are also unlimited as to whether they are the same or different constituents. This combined production of the "interpolated perturbation response profile" is NEW MATTER. Consideration of claim 53, as originally filed, reveals that only the diagnostic profile utilizes measuring a first plurality of cellular constituents and that the "perturbation response profile" utilizes measuring a second plurality of cellular constituents. That is, the "perturbation response profile" is not produced from a combination of first and second pluralities of cellular constituents measurements as now in claim 53. Further consideration of what is described as filed regarding an "interpolated perturbation response profile" reveals that it also only is produced from a "second" plurality of cellular constituents measurements. Independent claims 53, 67, 71, and 79-81 and claims directly or indirectly dependent therefrom contain this NEW MATTER due to their dependence.

#### **NON-STATUTORY SUBJECT MATTER**

Claims 53-59, 67, 68, 71, 72, and 79-81 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Consideration of the "Computer-Related Inventions" section of the MPEP at section 2106, Part IV, subpart B, has revealed that the instant claims are directed to non-statutory subject matter without requiring performance of a result outside of a computer or representing some type of physical transformation which is concrete or

**Office Action Summary**

Application No.

09/975,843

Applicant(s)

FRIEND ET AL.

Examiner

Ardin Marschel

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 53-59, 67, 68, 71, 72 and 79-81 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 53-59, 67, 68, 71, 72, & 79-81 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. (1 copy).
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1631

tangible. Thus, the manipulation of data or conversion of data, in this case data from measurements of cellular constituents is the claimed subject matter without any physical transformation outside of a computer or representation thereof. The above instant claims also lack statutory subject matter due to being directed to nonfunctional descriptive material since the claims lack performance or control of a physical transformation, only data manipulation is required. The presence of such nonfunctional descriptive material on a computer medium or in a computer system, albeit with a processor and memory, does not prevent this rejection because such nonfunctional descriptive material lacks the implementation of physical functionality regarding such computer elements. Additionally, applicants may wish to argue that the computational methodology is directed to a practical invention. Consideration of the MPEP at section 2106, Part IV, subpart B, sub-subpart 2, reveals that such a practical invention type requires the production of a useful, concrete, and tangible result which is reasonably interpreted as at least some physicality of result or representation thereof as required for statutory subject matter. The determining and interpolating methodology per se as instantly claimed subject matter are reasonably deemed a manipulation of data for such methodology practice, without any physicality, that is, concrete or tangible, requirement for claim practice. It is noted that the practical invention requirement is directed to a required combination of a useful, concrete, and tangible result which supports this rejection if only one or more of these criteria fail to be met in the claimed subject matter.

### **VAGUENESS AND INDEFINITENESS**

Claims 53-59, 67, 68, 71, 72, and 79-81 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 53, line 9, the phrase "said cell type" lacks clear antecedent basis as to such a type. It is acknowledged that "a cell" is cited in line 8 of claim 53, but that no typing limitation is set forth anywhere in lines 1-8, nor particularly, in the "a cell" limitation in said line 8 of instant claim 53. Thus, claim 53 is vague and indefinite as to what "cell type" is meant via the phrase "said cell type" in line 9 of claim 53. Claims 67 and 71, line 9 of each claim; claim 80, line 22; and claim 81, line 11; also contains this unclarity. Claims directly or indirectly dependent from claim 53, 67, or 71 also contain this unclarity due to their dependence. Clarification via clearer claim wording is requested.

No claim is allowed.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the Central PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The Central PTO Fax Center number is (571) 273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., AU 1631 Supervisory Patent Examiner, whose telephone number is (571) 272-0718. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instrument Examiner, Tina Plunkett, whose telephone number is (571) 272-0549.

Art Unit: 1631

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 19, 2005

*Ardin H. Marschel 7/19/05*  
**ARDIN H. MARSCHEL**  
**SUPERVISORY PATENT EXAMINER**